

LANGUAGE ARTS TOPICS – GRADES K-3

SPELLING

1. Identify letter sounds.
2. Distinguish likenesses and differences in letter forms.
3. Associate sounds with symbols.
4. Arrange words in alphabetical order with the 1st, 2nd, & 3rd letter.
5. Memorize and write assigned words correctly.
6. Identify compound words, base words, homonyms, antonyms, synonyms, and contractions, prefixes and suffixes.
7. Identify and use word endings correctly.
8. Apply word attack skills to spelling.
9. Use dictionary skills.

GRAMMAR

1. Produce, orally and in writing, basic sentence patterns.
2. Expand basic sentence patterns with words and phrases.
3. Develop basic sentences into interrogative, imperative & declarative forms.
4. Use regular verb forms correctly in writing or speaking.
5. Recognize the changing nature of language.

LITERATURE

1. Recognize through stories & poems the experiences & emotions of other people.
2. Articulate emotional reactions and motives of story characters.
3. Communicate ideas, concepts and feelings through creative dramatics.
4. Choose to read various types of material on a variety of subjects.
5. Recognize characteristics of nursery rhymes, fanciful stories & poetry.
6. Recognize parts of books.
7. Make choices which indicate an appreciation of good literature through an awareness of authors, illustrators, publishers and interests.
8. Pursue an independent interest for pleasure reading.
9. Orally participate in a variety of literary forms.
10. Interpret pictures.
11. Name common elements of story.
12. Retell favorite stories and poems.
13. Identify non-stereotyped and non-biased literature.

MEDIA

1. Combine information from a variety of media to expand background information.
2. Formulate non-print material & media to express ideas & feelings, & to retell stories.
3. Interpret audiovisual resources to improve language fluency.
4. Read newspapers and magazines to learn about current events.

READING

1. Associate printed word with object or concept it represents and predicts meaning of unknown words through context.
2. Extend reading vocabulary by using appropriate word attack skills.
3. Develop literal, interpretive & critical reading comprehension skills.
4. Self-correct approximations based on semantic and syntactic clues.
5. Expand vicarious experiences by exposure to wide variety of reading materials, including expanded role models.
6. Use beginning reference skills to locate information.
7. Read material orally with fluency, clarity & expression.
8. Demonstrate ability to self-select materials and participate in sustained silent reading.
9. Predict story outcome.

REASONING

1. Identify similarities and differences in ideas & concepts & arrange & categorize them.
2. Demonstrate the process of logical thinking by sequencing, classifying, asking questions, making choices, & expressing opinions as the basis for developing problem solving abilities.
3. Derive logical solutions to simple problems by making appropriate choices & reasonable decisions.
4. Draw reasonable conclusions from information.

SPEAKING/LISTENING

1. Use oral expression experience to demonstrate proficiency of the English language in a variety of situations such as small group discussions & individual performance.
2. Use clear, concise language.
3. Alternate speaking-listening interactions during a conversation and discussions.
4. Listen & respond appropriately to oral language for the following purposes: attentively to gain information; analytically for comprehension; appreciatively for enjoyment; critically for making judgment; marginally at the passive level; & courteously.
5. Develop an understanding of the inappropriateness of name calling, ethnic or racial slurs & demeaning jokes.

WRITING

1. Demonstrate the understanding that oral language can be written by dictating captions, experience charts & stories.
2. Tell & write brief fictional & personal narratives that derive from experience.
3. Recall through writing simple personal data.
4. Participate in daily writing activities.
5. Write paragraphs containing stated main idea & supporting details.
6. Share personal experiences & feelings in writing prose & poetry.
7. Expand writing vocabulary by applying phonetic principles & inventive spelling to bring spoken language to paper.
8. Write legibly in manuscript or cursive.

MATH TOPICS – GRADES K-3

NUMBERS & NUMERATION

1. Read and write whole numbers.
2. Compare the size of whole numbers using place value manipulative materials.
3. Demonstrate the ability to conserve number.
4. Count by ones, twos, fives, and tens.
5. Demonstrate one-to-one correspondence using manipulative materials.
6. Demonstrate the use of ordinal numbers.
7. Give examples, which relate simple fractions to parts of a whole.
8. Order whole numbers from zero to one hundred.

OPERATIONS

1. Illustrate addition and subtraction using manipulative materials.
2. Demonstrate the relationship between addition and subtraction using manipulative materials.
3. Recognize and use the commutative and associative properties of addition with manipulative materials. (not necessarily by their formal names and definitions)

MEASUREMENT

1. Name the seasons, months, days of the month, and the days of the week.
2. Tell time to the hour and half-hour.
3. Determine the value of collections of coins to \$1.00.
4. Use appropriate vocabulary to describe the relative positions of objects: above, below, behind, in front, etc.
5. Measure length in arbitrary units using manipulative materials.

GEOMETRY

1. Identify and illustrate squares, circles, rectangles, and triangles.
2. Recognize open and closed curves.
3. Recognize parallel and intersecting lines.

COLLECTION AND USE OF DATA

1. Gather, organize, and interpret simple data.
2. Read and construct pictographs and bar graphs.
3. Predict simple outcomes.

PROBLEM SOLVING

1. Create and solve simple word problems that are suggested by groupings of physical materials.
2. Evaluate the reasonableness of answers.
3. Interpret a written problem verbally.
4. Use pictorial representations to solve problems.
5. Estimate answers.
6. Create number stories for oral exploration of numerical problems.

SCIENCE TOPICS – GRADES K-3

PROCESSES

1. **OBSERVING** – using the senses (seeing, tasting, touching, hearing and smelling) to find out about objects or events in the environment.
2. **DESCRIBING AND COMPARING** – recognizing and relating ways in which objects or events are alike or different.
3. **CLASSIFYING** – grouping objects or events according to their observed characteristics.
4. **INFERRING** – suggesting explanations, reasons or causes for events which have occurred which may not be directly observable.
5. **PREDICTING** – describing in advance the outcome of an event or process based on observations or data.
6. **MEASURING** – finding out about an unknown quantity by comparing its mass, areas, length or volume with a known quality.
7. **COMMUNICATING** – conveying information through the use of oral or written descriptions, pictures, graphs, charts, maps, demonstrations, etc.
8. **INTERPRETING DATA** – explaining the meaning or the significance of information regarding an object or event.
9. **FORMULATING QUESTIONS** – thinking, asking and writing questions based on the nature and process of scientific events.
10. **EXPERIMENTING** – designing and carrying out procedures under controlled conditions in which variables are limited to obtain reliable information about interrelationships between objects and events.
11. **HYPOTHESIZING** – stating a probable explanation for some occurrence which is subject to testing.

LIFE SCIENCE

1. Explain the basic needs of plants and animals.
2. Classify different plants according to characteristics such as habitat, function, season, etc.
3. Graph the growth of a plant from a seed from data collected daily over a period of time.
4. From a picture of an animal describe how its structure helps it to survive.
5. With three known characteristics of a mystery animal, classify it as a mammal, reptile, amphibian, bird, insect, or fish.
6. Illustrate four chronological stages of growth of an animal.
7. Describe the breathing process.
8. Illustrate the circulation of blood to and from the heart.
9. Dramatize the function of the brain in the nervous system.
10. Trace the path of a food particle through the digestive system.
11. Suggest systematic ways of finding a solution to a given science problem.

PHYSICAL SCIENCE

1. Demonstrate through an experiment how matter can change from one state to another (i.e. liquid becomes solid, liquid becomes gas by heating or cooling.).

2. Compare and contrast the properties of liquids, solids & gasses.
3. Demonstrate the operation of a pump & relate it to the workings of a heart.
4. Use the concepts of color, reflection, shadow & intensity to explain light.
5. Use a source of heat to show expansion and contraction of metals.
6. Through an experiment, explain variations in sound using concepts of pitch and vibration.
7. Compose and/or illustrate electrical safety rules.
8. Demonstrate properties of magnetism.
9. Observe the physical properties of several objects & predict which will be magnetic.

EARTH & SPACE SCIENCE

1. Show how minerals are formed using a solution that evaporates leaving crystals.
2. Identify the major components of the air we breathe.
3. Draw a diagram of our solar system.
4. Given information about an imaginary planet (temperature, length of year, composition), locate it in the solar system.
5. Calculate and compare your age on earth to that on another planet after one orbit around the sun.
6. Using a light source, describe how the sun and stars produce heat and light.
7. Design a community on the moon, and contrast it to one on earth.
8. Trace water through its natural cycle.
9. Explain with models the Earth's daily and seasonal cycles.
10. Collect & record weather observations & make predictions based on this data.
11. Research and report on a destructive natural event and its effect on the weather and the environment (a hurricane, tornado, volcano, flood, etc.)
12. Classify rocks by how they were formed, by hardness, or by texture.
13. Identify several common minerals found in Vermont
14. Illustrate the formation of a fossil.

ENVIRONMENTAL SCIENCE

1. Recognize the effects of natural forces in changing the shape of the land.
2. Make an oral report to the class on steps taken at home to conserve air, water, light, heat and/or soil.
3. Write a class article for the local newspaper listing spots in the community with noticeable noise, air, water, or land pollution adding suggestions for improvement.
4. Demonstrate the effects of one of the following changes using before and after models: erosion, building construction, forest fire, or dumping.
5. Describe a simple ecosystem that demonstrates the relationship of plants and animals to their environment (i.e. diorama, mural).
6. Compare the plant life of a desert, an ocean, and a Vermont field.
7. "Construct" a habitat for a specific animal taking into consideration the need for shelter, food, protection and seasonal change.
8. Predict what would happen to an animal if one of the following occurred: a) winter never came, b) water supply was polluted, c) a new highway was built through the forest.
9. Identify some good and bad effects of technology on your daily life.
10. Create a technological invention that would benefit mankind.

SOCIAL STUDIES TOPICS – GRADES K-3

CONTENT

Self-awareness
Family
School
Neighborhood
Community
Occupations
Rules & responsibilities
Traditions & customs
Transportation & communication
Interdependence of people & cultures
Time & sequence
Map skills

GEOGRAPHY

1. State home address & telephone number.
2. Construct a simple floor plan
3. Describe route taken from home to school.
4. Identify & explain landmarks & other geographical features in the community.
5. Identify environmental features in the community.
6. Explain how climate & surroundings affect the way people dress & live.
7. Use & draw simple charts, diagrams, graphs, & maps.
8. Apply terms involved with direction, location, and distance.
9. Interpret simple maps of classroom, school, & community.
10. Recognize a globe as a representation of the Earth, & identify simple features on it.
11. Recognize simple map symbols.

HISTORY

1. Investigate family history.
2. Explore local history & historical sites.
3. Recognize variety of nationalities in community.
4. Identify history of local occupations including the contributions of women & minorities.
5. Identify events & people from the past, including women & minorities, to help understand our traditions.
6. Explain basis of important holidays.
7. Use the calendar to identify & locate the days, months of the year, seasonal celebrations, & holidays.
8. Identify days of the week, months, seasons, year; use related time concepts.
9. Gather & interpret information from simple pictures, charts, & graphs.
10. Use the media to gather information about current events.

ECONOMICS

1. Describe how people depend on each other for goods and services.
2. Recognize that money & other forms of economic exchange may be used to obtain goods & services that people need and want.
3. Identify natural resources of the community & recognize their importance.
4. Identify different means of transportation.
5. Recognize interdependence of area communities.
6. Describe the kinds of work people do & the tools they use.
7. Identify people's needs & wants.
8. Recognize that people must make choices about how to spend money.

LAW & GOVERNMENT

1. Assume classroom responsibilities.
2. Identify the need for rules at home & in school.
3. Help make classroom rules.
4. Tell how and why rules protect rights & property.
5. Participate actively in the decision-making process by identifying problems & suggesting possible solutions.
6. Identify the adults in school by the jobs they perform.
7. Identify local, state, & national symbols & patriotic songs; and recite the pledge of allegiance.
8. Role play process of elections.
9. Recognize that citizens can influence government decisions.
10. Demonstrate cooperation when working in a group.
11. Recognize basic freedoms & rights provided by the American form of government.

SOCIOLOGY

1. Recognize self as a unique, individual.
2. Describe personal feelings.
3. Identify different family structures.
4. Identify the physical & social needs of a family.
5. Identify tasks that people must do in the family & at school.
6. Identify examples of the basic physical needs of people: food, clothing, & shelter.
7. Recite personal biographical data.
8. Demonstrate appropriate behavior toward others, & exhibit good social skills.
9. Participate in group activities.

ANTHROPOLOGY

1. Identify the different ways people communicate.
2. Compare & contrast family lifestyles of different cultures.
3. Examine similarities & make simple generalizations about communities being studied.
4. Compare & contrast surrounding communities.
5. Recognize interdependence of people and groups.
6. Recognize changes in environment & describe ways people adapt to change.
7. Compare customs & habits of different ethnic groups in the United States & groups in other parts of the world.

PSYCHOLOGY

1. Discover that rules, beliefs, customs, and values influence behavior.
2. Recognize that an individual has social roles in the family, school, and community which affects his/her behavior.